# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application

Kazuyuki SAWADAISHI et al.

**Examiner:** 

Application Number: 10/550,951

**Group Art Unit:** 

Filed: September 28, 2005

Confirmation No.: 6108

Attorney Docket No.: SAWA3005/ESS

For:

**RECOMBINANT ANTIBODY RECOGNIZING DIOXIN AND** 

GENE ENCODING THE ANTIBODY

### **LETTER ENCLOSING ENGLISH TRANSLATION** OF INTERNATIONAL PRELIMINARY REPORT

**Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Enclosed is a copy of the English translation of the International Preliminary Report on Patentability (Form PCT/IB/373) in the corresponding PCT application, together with the Notification relating thereto (Form PCT/IB/338).

> Respectfully submitted. **BACON & THOMAS, PLLC**

> > Registration No. 22,495

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Date: March 30, 2006

### PATENT COOPERATION TREATY

To:

PCT/JP2004/004355



## PCT

### From the INTERNATIONAL BUREAU

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

KAWAMIYA, Osamu AOYAMA & PARTNERS IMP Building 3-7, Shiromi 1-chome Chuo-ku, Osaka-shi Osaka 5400001 JAPON

Date of mailing (day/month/year) 02 March 2006 (02.03.2006)						
Applicant's or agent's file reference 664413	IMPORTANT NOTIFICATION					
International application No. PCT/JP2004/004355	International filing date (day/month/year) 26 March 2004 (26.03.2004)					
Applicant KYOTO ELECTRONICS MAN	NUFACTURING CO., LTD. et al					
·						
1. Transmittal of the translation to the applicant.						
The International Bureau transmits herewith a copy of the patentability (Chapter I).	he English translation of the international preliminary report on					
The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).						
2. Transmittal of the copy of the translation to the designated or	elected Offices.					
	The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected					
None						
translation from the International Bureau only upon their request:	The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:					
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3. Reminder regarding translation into (one of) the official lang						
must contain a translation of any annexes to the international pre-						
It is the applicant's responsibility to prepare and furnish applicable time limit (Rule 74.1). See Volume II of the PCT A	such translation directly to each elected Office concerned within the applicant's Guide for further details.					
1						

Facsimile No.+41 22 740 14 35 Form PCT/IB/338 (January 2004)

The International Bureau of WIPO

34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Masashi Honda

Facsimile No.+41 22 338 70 10

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# PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 664413	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/JP2004/004355	International filing date (day/month/year) 26 March 2004 (26.03.2004)	Priority date (day/month/year) 28 March 2003 (28.03.2003)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant KYOTO ELECTRONICS MANUFACTURING CO., LTD.				

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).					
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference					
	to the international preliminary report on patentability (Chapter I) instead.					
3.	This report contains indications relating to the following items:					
	Box No. I	Basis of the report				
	Box No. II	Priority				
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
	Box No. IV	Lack of unity of invention				
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
	Box No. VI	Certain documents cited				
	Box No. VII	Certain defects in the international application				
	Box No. VIII	Certain observations on the international application				
4.	The International Bureau will conot, except where the applicant date (Rule 44bis .2).	ommunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but makes an express request under Article 23(2), before the expiration of 30 months from the priority				
Щ						
		Date of issuance of this report 22 February 2006 (22.02.2006)				

Authorized officer

Telephone No. +41 22 338 70 10

Masashi Honda

Facsimile No. +41 22 740 14 35 Form PCT/IB/373 (January 2004)

The International Bureau of WIPO 34, chemin des Colombettes

1211 Geneva 20, Switzerland

#### PATENT COOPERATION TREATY

Translation From the INTERNATIONAL SEARCHING AUTHORITY PCT WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) FOR FURTHER ACTION Applicant's or agent's file reference See paragraph 2 below 664413 Priority date (day/month/year) International filing date (day/month/year) International application No. 26.03.2004 28.03.2003 PCT/JP2004/004355 International Patent Classification (IPC) or both national classification and IPC Applicant KYOTO ELECTRONICS MANUFACTURING CO., LTD. This opinion contains indications relating to the following items: Basis of the opinion Box No. I Box No. II Priority Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. III Box No. IV Lack of unity of invention Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability, citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA/JP Authorized officer Telephone No. Facsimile No.

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/004355

Bo	x No. I	Basis of this opinion	
1.	With filed	regard to the language, this opinion has been established on the basis of the international application in the language in which it was unless otherwise indicated under this item.	
		This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under	
	•	Rule 12.3 and 23.1(b)).	
2.	Witl inve	h regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed intion, this opinion has been established on the basis of:	
	a.	type of material	
		a sequence listing	
		table(s) related to the sequence listing	
	b.	format of material	
		in written format	
		in computer readable form	
	c.	time of filing/furnishing	
		contained in the international application as filed.	
		filed together with the international application in computer readable form.	
		furnished subsequently to this Authority for the purposes of search.	
3.	$\boxtimes$	In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	
4.	.Add	ditional comments:	
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# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/004355

Box				the 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; oporting such statement	
1.	Statement				•
	Novelty (N)		Claims	1-10	YES
			Claims		NO
	Inventive step	(IS)	Claims		YES
			Claims	1-10	NO
	Industrial app	licability (IA)	Claims	1-10	YES
			Claims		NO
l					

#### 2. Citations and explanations:

- Document 1: JP 2002-119279 A (Zaidan Hojin Shokuhin Yakuhin Anzen Center) 23 April
- Document 2: STANKER, L. H. et al. Toxicology 1987, Vol. 45, No. 3, p. 229-243
- Document 3: Naoya OMURA et al. Environmental Management, 10 March 2003, Vol. 39, No. 3, p. 251-256

Based on the descriptions in documents 1-3, the inventions of claims 1-10 lack an inventive step. Documents 1-3 describe a monoclonal antibody having binding activity to 2,3,4,7,8-pentachlorodibenzofuran. Therefore, persons skilled in the art can easily clone DNA that encodes that monoclonal antibody from a hybridoma that produces that monoclonal antibody and manufacture a recombinant antibody using that DNA. Moreover, persons skilled in the art can easily use the 2,3,4,7,8-pentachlorodibenzofuran described in documents 1-3 as an immunogen to obtain a monoclonal antibody having binding activity to 2,3,4,7,8-pentachlorodibenzofuran, clone DNA encoding that monoclonal antibody from a hybridoma that produces that monoclonal antibody, and manufacture a recombinant antibody using that DNA.